Documentation – Land Use Classification of the Rur Catchment 2009n

	Note: By downloading this dataset you accept adequate reference in case this data will be discussed or used in any publication or presentation. In this case please use the following citation: Waldhoff, Guido (2012): Enhanced land use classification of 2009 for the Rur catchment. TR32DB. DOI: 10.5880/TR32DB.2.
Content	
files:	data lu09n.tif
	lu09n.tfw
	lu09n_ascii.txt [land use dataset as ascii file]
	lu09n_ascii.prj
	documentation
	this file
	Read_Me.txt
	Legend_lu09n.txt
data size:	7 MB (116 MB unzipped)
extend:	Rur Catchment
provider:	Z1 (G. Waldhoff)
language:	english
date of publication:	10/2012
date of purchase:	/
Description	
description:	This data set contains the enhanced land use classification of 2009 for the study area of the CRC/Transregio 32: "Patterns in Soil-Vegetation-Atmosphere Systems: monitoring, modelling and data assimilation", which corresponds to the catchment of the river Rur. The study area is mainly situated in the western part of North Rhine-Westphalia (Germany) and parts of the Netherlands and Belgium, covering an area of approximately 2365 square kilometers. The land use classification is derived from supervised, multi temporal remote sensing data analysis using "Advanced Spaceborne Thermal

land use analysis datasets and of the following acquisition dates were used from RapidEye: May 24, June 01, August 15/16, August 31 and September 08. From ASTER a dataset of July 27 was incorporated. Full coverage of the study area was not available for all acquisition dates.

To enhance the information content of the land use data product the Multi-Data Approach (MDA) was used to combine the remote sensing derived land use information with additional data sets like the 'Authorative Topographic-Cartographic Information System' (ATKIS Basic-DLM, AAA schema) and 'Physical Block' information. The methodology of the MDA is described in more detail in Waldhoff & Bareth (2008) and in Waldhoff et al. (2012).

The classification is provided in GeoTIFF and in ASCII format. Spatial resolution: 15 m; projection: WGS84, UTM Zone 32N.

References:

Waldhoff, G. & Bareth, G. (2008): GIS- and RS-based land use and land cover analysis: case study Rur-Watershed, Germany. Proc. SPIE 7146, Geoinformatics 2008 and Joint Conference on GIS and Built Environment: Advanced Spatial Data Models and Analyses, 714626 (November 10, 2008); doi:10.1117/12.813171.

Waldhoff, G., Curdt, C., Hoffmeister, D. & Bareth, G. (2012): Analysis of multitemporal and multisensor remote sensing data for crop rotation mapping. - ISPRS Ann. Photogramm. Remote Sens. Spatial Inf. Sci., I-7, 177-182, doi:10.5194/isprsannals-I-7-177-2012.

Acknowledgements:

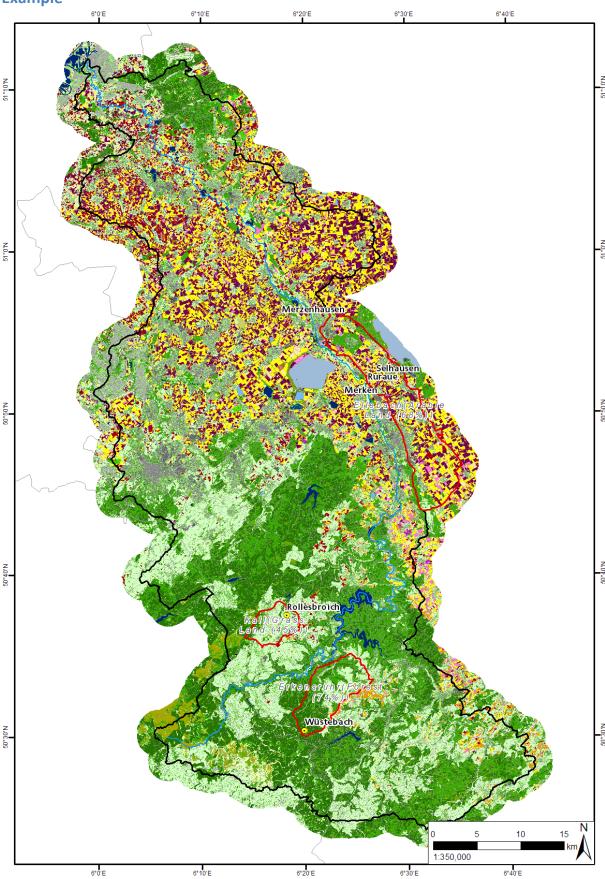
We thank the German Aerospace Center (DLR) for the provision of data from the RapidEye Science Archive and Geobasis.NRW for the provision of the ATKIS-Basic-DLM.

The ASTER L1A data were obtained through the online Data Pool at the NASA Land Processes Distributed Active Archive Center (LP DAAC), USGS/Earth Resources Observation and Science (EROS) Center, Sioux Falls, South Dakota (http://lpdaac.usgs.gov/get_data).

abbreviations used in data:

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Example



Coverage of the Land Use Classification 2009n

Author

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